

Work Order ID 53878

November 23, 2009 10:54:54 AM

Page 1

Item ID: D4010-041

Accept

Setup Start

Revision ID:

Stop

Item Name: Bearpaw Assembly

Start Date: 11/30/2009 Start Qty: 12.00

Cust Item ID:

Required Date: 12/2/2009 Req'd Qty: 12.00

Customer:

Reference:

Approvals: Process Plan: *mf*

Date: 09-11-23 Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D4010-041

C

0.00



HandThermo

Memo

0.00

Hand Finishing Thermoforming

Pick Kit

BB 09/12/15

110

0.00



HandThermo

Memo

0.00

Hand Finishing Thermoforming

1- Use wearplate jig DT9542 to transfer drill holes in bearpaw as per dwg and use 0.375" unibite to open holes to finish size.
2- Use wearbar to transfer drill hole and open to finish size as per dwg
3- Deburr
4- Assemble as per Dwg D4010

BB 09/12/15

X12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

120

QC2- Inspect parts off machine FAI/FAIB

0.00



QC

Memo

0.00

Quality Control

09/12/15
X12

130

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

⇒ 801615

X12

140

Identify as per dwg & Stock Location: _____

0.00



Packaging

Memo

0.00

Packaging

PPO
53225

12/2/10 (12)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Required Date: 12/2/2009 Req'd Qty: 12.00

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

150

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10/01/06

MK

10-01-05

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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NOTE: Date & initial all entries

Picklist Print

November 23, 2009 10:54:54 AM

Page 1

Work Order ID: 53878

Parent Item: D4010-041

Parent Item Name: Bearpaw Assembly

Comments: IPP RevB: 09/11/03 Drawing changed to accomidate OEM and Dart Skidtube.
DL. Verified by:DD IPP Rev. C Dwg.
Redesign 09/11012 DL VERIFIED BY:DD

Start Date: 11/30/2009

Required Date: 12/2/2009

Start Qty: 12.00

Required Qty: 12.00

Component Item ID/	Replacement	Mfg/	Bin	Primary	Last	Route	Unit of	Qty on	Remaining	Qty	Date	Status
AN3C5A		Purchased	No			100	Each	1,104.000	60.0000			



Bolt

Warehouse	Loc Qty	Loc Code
Location		
Main Warehouse		
ST	1104	
111424	8	
111707	69	
112314	1	
112641	426	
113121	300	
113149	300	

BB 09/12/15

D3456-1RevA

Manufactured No



Washer

Warehouse	Loc Qty	Loc Code
Location		
OFFSHORE		
FG	7	
25701	7	
Main Warehouse		
ST	148	
51653	148	

BB 09/12/15

D4010-1

Manufactured No



Bearpaw

0.0000 12.0000



53879 X12 BB 09/12/15

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Parent Item: D4010-041



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Required Date: 12/2/2009

Comments: IPP RevB: 09/11/03 Drawing changed to accomidate OEM and Dart Skidtube.
DL. Verified by:DD IPP Rev. C Dwg.
Redesign 09/11012 DL VERIFIED BY:DD

Start Qty: 12.00

Required Qty: 12.00

Component Item ID/	Replacement	Mfg/	Bin	Primary	Last	Route	Unit of	Qty on	Remaining	Qty	Date	Status
D4013-041		Manufactured	No			100	Each	0.0000	12.0000			
										53880 X12		BB 09/12/15
Wearplate Assembly												
D4015-041		Manufactured	No			100	Each	22.0000	60.0000			
Wearbar Weldment												

Warehouse Location

Location

HONG KONG

ST

22

53252

53818

22

100

Each

4,825.000

60.0000

60

BB 09/12/15

MS21043-3



Nut

Purchased

No

Warehouse Location

Location

OFFSHORE

FG

80

103691

80

Main Warehouse

ST

4745

111819

78

112243

39

112314

4628

80

BB 09/12/15

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DL. Verified by:DD IPP Rev. C Dwg.
Redesign 09/11012 DL VERIFIED BY:DD

Start Qty: 12.00

Required Qty: 12.00

Component Item ID/	Replacement	Mfg/	Bin	Primary	Last	Route	Unit of	Qty on	Remaining	Qty	Date	Status
MS21043-4		Purchased	No			100	Each	1,341.000	36.0000			
Nut												

Warehouse Loc Qty Loc Code

Location

OFFSHORE

FG

40

104603

40

Main Warehouse

ST

1301

112243

2

112314

499

112492

300

113064

500

307/12/15

48.

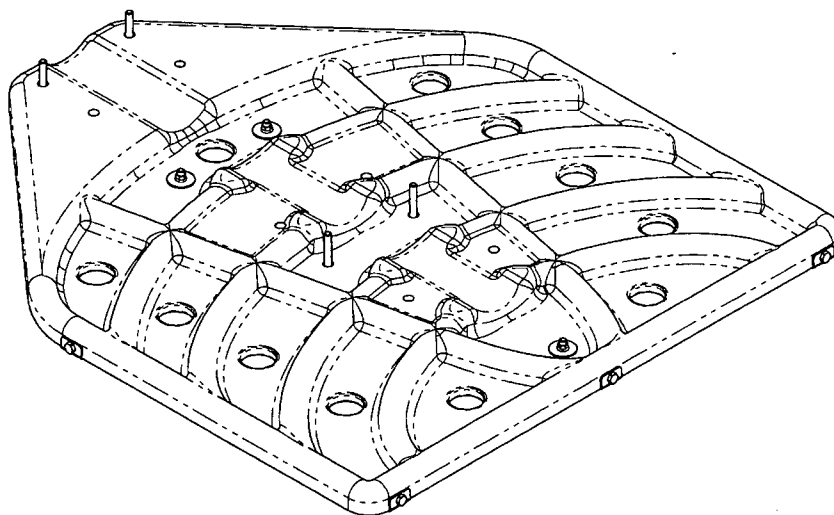
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



53878

D4010-041 BEARPAW ASSEMBLY (407)

RELEASED
2009-11-21
MB

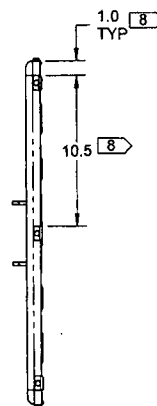
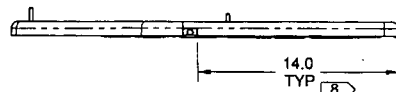
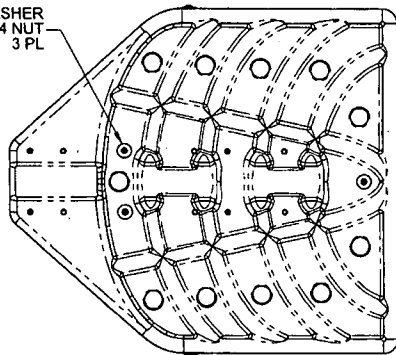
C	OPTIMIZED DESIGN BASED ON FUNCTIONALITY AND TO EASE MANUFACTURING	MB	09.11.10
B	REDESIGNED, ADDED PROVISIONS FOR COMPATIBILITY WITH OEM SKIDTUBES/SADDLES; REDEFINED SOME TOLERANCE	MB	09.11.02
A	NEW ISSUE	MB	09.10.22
REV.	DESCRIPTION	BY	DATE
DESIGN	1		
DRAWN	1		
CHECKED	1		
MFG. APPR.	1		
APPROVED	1		
DE APPR.	1		
DATE	09.11.10		

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. **D4010** REV. C
TITLE **BEARPAW (407)** SCALE NTS
SHEET 1 OF 3

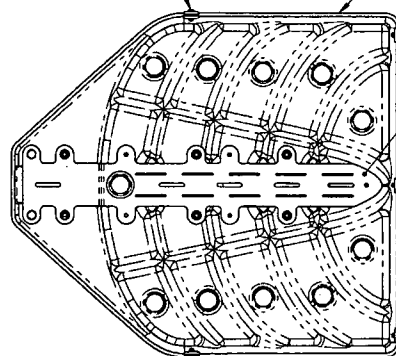
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D3456-1 WASHER
MS21043-4 NUT
3 PL



#53878.

AN3C5A BOLT
D4015-041 WEARBAR
MS21043-3 NUT



AN3C5A BOLT
D4015-041 WEARBAR
MS21043-3 NUT

D4010-1
BEARPAW

AN3C5A BOLT
D4015-041 WEARBAR
MS21043-3 NUT

D4013-041 WEARPLATE
ASSEMBLY

AN3C5A BOLT
D4015-041 WEARBAR
MS21043-3 NUT

AN3C5A BOLT
D4015-041 WEARBAR
MS21043-3 NUT

D4010-041 BEARPAW ASSEMBLY (407)

ITEM	QTY -041	P/N	DESCRIPTION
1	X	D4010-041	BEARPAW ASSEMBLY (407)
3	3	D3456-1	WASHER
4	1	D4010-1	BEARPAW
5	1	D4013-041	WEARPLATE ASSEMBLY
6	5	D4015-041	WEARBAR
21	5	AN3C5A	BOLT
22	5	MS21043-3	NUT
23	3	MS21043-4	NUT

RELEASED
2009-11-24

D4010-041 NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 9.41 lbs
- 8) LOCATE D4015-041 (ITEM 5) AS SHOWN AND TRANSFER DRILL $\varnothing 0.191$ " HOLE FROM D4015-041 TO D4010-1 BEARPAW AND FASTEN USING PRESCRIBED HARDWARE.
- 9) TORQUE: AN3 NUTS = 15-20 in-lb
AN4 NUTS = 50-70 in-lb

DESIGN	1	DART AEROSPACE LTD	
DRAWN	1	HAWKESBURY, ONTARIO, CANADA	
CHECKED	1	DRAWING NO. D4010	REV. C
MFG. APPR.	1	TITLE BEARPAW (407)	SHEET 2 OF 3
APPROVED	1	SCALE	
DE APPR.	1	NTS	
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#53878

